

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number  
WO 2004/022654 A2

(51) International Patent Classification<sup>7</sup>:

C09D

(21) International Application Number:

PCT/US2003/027572

(22) International Filing Date:

3 September 2003 (03.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/408,916 5 September 2002 (05.09.2002) US

(71) Applicant (for all designated States except US):  
VOCFREE, INC. [US/US]; 163 South Street, Hack-  
ensack, NJ 07601 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): SUGERMAN, Gerald  
[US/US]; 8 Cambridge Drive, Allendale, NJ 07401 (US).

(74) Agent: HSI, Jeffrey, D.; Fish & Richardson P.C., 225  
Franklin Street, Boston, MA 02110 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FAST DRYING COATINGS

(57) **Abstract:** Novel, rapidly drying, low volatile organic compound (VOC), minimal dot gain coatings, (including lithographic ink and varnish systems) are herein described. These systems dry sufficiently rapidly, that their usage eliminates ink drying speed as the rate limiting factor in most lithographic printing applications. In addition to providing enhanced drying rates as compared with their conventional counterparts, the rapid drying, low/no VOC lithographic coating systems of the instant invention can provide the user with significant improvement in dried film rub resistance.



WO 2004/022654 A2